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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,252	01/27/2004	Thomas G. Rukavina	1908A1	9565

7590 08/10/2006

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EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,252

Applicant(s)

RUKAVINA, THOMAS G.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 10-23 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/22/2006.
2. Applicant's election with traverse of Group I, claims 1-9, in the reply filed on 5/22/2006 is acknowledged. The traversal is on the ground(s) that the reaction product of Inventions I and II is the same. This is not found persuasive because the claim language is directed to two different reaction products as indicated in the Restriction requirement. Because of their recognized divergent subject matter, restriction for examination purposes is proper. Should an allowable subject matter be found in both Groups, the claims of the non-elected Invention will be rejoined at the time of allowance.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al. (US Pat. 5,124,424) or Nagai et al. (US Pat. 5,326,846).

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Endo discloses a hydroxyl-terminated polyurethane reaction product prepared from an organic diisocyanate, a chain extender, and a polycarbonate polyol (see abstract). The organic diisocyanate includes aliphatic diisocyanate (see col. 5, ln. 25). The chain extender includes 1,5-pentadiol (see col. 5, ln. 1).

Nagai discloses a hydroxyl-group terminated polyurethane reaction product prepared from a diisocyanate, a diol, and a chain extender (see col. 3, ln. 10-19). The diisocyanate includes an aliphatic diisocyanate; the diol includes polycarbonate diol (see col. 3, ln. 21, 35-36). The chain extender includes 1,5-pentadiol (see col. 4, ln. 27-28).

With respect to the viscosity and crystallinity properties, since the references discloses the same reaction product as presently claimed, it would inherently have the same properties.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo or Nagai, in view of Reich et al. (US Pat. 5,563,233) and further in view of Watson (US Pat. 4,264,752).

Endo and Nagai are as set forth above and incorporated herein. Both references teach the use of hexamethylene diisocyanate (see Endo, col. 5, ln. 26; Nagai, col. 3, ln. 26), but fail to teach the use of 2,2,4-trimethylhexamethylene diisocyanate.

Reich discloses a reaction product prepared from trimethylhexamethylene diisocyanate or hexamethylene diisocyanate (see col. 5, ln. 35-36). Therefore, it would have been obvious to one of ordinary skill in the art, that using trimethylhexamethylene diisocyanate or hexamethylene diisocyanate, as taught by Reich in the invention of Endo or Nagai, would have resulted in the same effects, since Reich teaches that these diisocyanates are alternatives of each other.

The Endo and Nagai combinations teach the polycarbonate to be a polypropylene carbonate, but fail to teach a polyoxyhexylene carbonate.

Watson teaches a polyurethane prepared from an alkylene glycol carbonate or a polyoxyalkylene glycol carbonate formed from hexylene glycol or propylene glycol (see paragraph bridging col. 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art, to have employed a carbonate containing polyoxyhexylene, as taught by Watson, in the invention of the Endo or Nagai combination. Since Watson teaches that the use of an alkylene glycol or polyoxyalkylene to form a polycarbonate would have given the same effects, since these glycols are used as alternative polyols.

Response to Arguments

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

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Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thao T. Tran
Primary Examiner
Art Unit 1711

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August 7, 2006